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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,997	10/18/2000	Steven James Mercer	T2131-906639	3156

7590 05/28/2003
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EXAMINER

DATSKOVSKIY, MICHAEL V

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 05/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/690,997

Applicant(s)

MERCER ET AL.

Examiner

Michael Datskovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-7, 9-21 and 23-29 is/are rejected.
- 7) ☐ Claim(s) 8 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plurality of bridge modules (claim 15) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. Figures 1-2B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-2, 7, 9-16, 21 and 23-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Mills et al.

Mills et al teach a modular backplane for industrial computer, Figs.1-11, comprising: a first modular backplane segment having a first front side 111 and a first back side 211, the first front side including a plurality of slots and the first back side including a first dedicated connector 117; a second modular backplane segment having a second front side 212 and a second back side 112, the first front side including a plurality of slots and the first back side including a first dedicated connector 118; a bridge module 116, Fig.4, having two connectors 425 and 426, one of which is engaged with the first dedicated connector 117 and the other is engaged with the second dedicated connector 118, thereby communicatively connecting the first and second backplane segments (claim 1). Mills et al teach furthermore: the bridge module, Fig.4, comprises a circuit board and a bridging integrated circuit 426 (claims 2 and 16); the first and second dedicated connectors are provided in an area where no slot is formed (claims 7 and 21); the first back side 111 and the second back side 112 each includes a plurality (seven) of slots (claims 9, 14, 21 and 23); the slots include J1, J2, J3, J4 and J5 connectors for the insertion of add-in peripheral cards and system slot board (claims 10-13 and 23-27); and it can be more than one (a plurality) of bridge modules (claim 15), see col.3, lines 27-30.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-6 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al.

Mills et al teach all the limitations of the claims except: said bridge module has height which is less than that of the slot (claim 3 and 17); this height is less than 16 mm (claims 4 and 18); the width of said bridge module is less than 12 HP (claims 5 and 19); and the length of the bridge module is less than 94 mm (claims 6 and 20). It would have been an obvious matter of design choice to make a bridge module having such sizes, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al as applied to claims 1-28 above, and further in view of Vaisanen et al or Bremer.

Mills et al teach all the limitations of the claim except said backplane is a monolithic backplane. First: It would have been obvious to one having ordinary skill in the art at the time the invention was made to make said backplane monolithic, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893). Second: According to the Title of the invention and the specification, a backplane is a modular backplane, disregarding to the amount of pieces it is made of. In case of a monolithic backplane can be achieved by providing a backplane with two

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separate buses, and considering parts of the backplane connected to the separate buses as separate backplane modules. Vaisanen et al or Bremer both teach a backplane comprising two buses and a plurality of modules connected to said buses, which allows to consider them as modular backplanes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make said backplane monolithic as it shown by Vaisanen et al or Bremer in the device by Mills et al in order to simplify a design of the device.

Allowable Subject Matter

8. Claims 8 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: A modular backplane, wherein the first dedicated connector is located in an area between a right-most pair of slots in the front side of the first backplane segment, and the second dedicated connector is located in an area between a left-most pair of slots in the front side of the second backplane segment, and vice versa.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Western (US Patent 6,542,952); Plunkett et al (US Patent 6,496,376) and Draughn et al (US Patent 6,349,037).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Datskovsky whose telephone number is (703) 306-4535. The examiner can normally be reached on Mn - Fry 8 - 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (703) 308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Patent Examiner

Michael Datskovsky



May 21, 2003